

Title (en)

Ovenized system containing micro-electromechanical resonator

Title (de)

Temperaturstabilisiertes System, das einen mikroelektromechanischen Resonator enthält

Title (fr)

Système thermostaté contenant un résonateur micro-électromécanique

Publication

EP 2595315 A1 20130522 (EN)

Application

EP 11189555 A 20111117

Priority

EP 11189555 A 20111117

Abstract (en)

Device comprising an ovenized system containing a MEM resonator with mechanical supports forming heating resistances for heating the resonator body through Joules heating. A temperature control system controls the temperature of the resonator by driving an electrical current through the heating resistances. The internal voltage of the resonator body is monitored by means of a replica circuit comprising resistances in parallel over the heating resistances and replicating the resistance ratio thereof. A compensation means is connected to an intermediate connection of the replica circuit and compensates for deviations of the replicated voltage level at the intermediate connection from a predetermined voltage level.

IPC 8 full level

H03H 9/02 (2006.01); **H03H 9/08** (2006.01); **H03L 1/04** (2006.01)

CPC (source: EP US)

H03H 9/02448 (2013.01 - EP US); **H03H 9/08** (2013.01 - EP US); **H03L 1/022** (2013.01 - EP US); **H03L 1/04** (2013.01 - EP US)

Citation (applicant)

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Citation (search report)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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DOCDB simple family (application)

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